AMENDMENTS TO THE CLAIMS:

This listing will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A method of modeling a chamber of the heart in three-dimensions comprising:

collecting a set of points inside the heart, each point having coordinates in three-dimensional space, forming a raw data set;

defining an interior direction and exterior direction for said raw data set;

selecting a first point;

selecting at least two neighbor points from said data set that are close and more exterior than said first point, said first point and said two neighbor points forming selected data;

forming a polygon with said selected data;

repeating said selecting steps and said forming step[[s]] forming a convex hull shape thus estimating the boundary of the heart from said raw data set.

2. (Currently Amended) A method of modeling a chamber of the hear in three-dimensions comprising:

collecting a set of points inside the heart, each point having coordinates in three dimensional space;

defining an interior direction and exterior direction for said raw data set;

selecting a first point;

selecting at least two neighbor points from said data set that are close and more exterior than said first point, said first point and said two neighbor points forming selected data;

forming a polygon with said selected data;

repeating said selecting steps and said forming step[[s]] forming a computed convex hull shape from said raw data set;

resampling said computed convex hull shape on a regular grid to generate an enlarged set of points;

smoothing said convex hull shape forming a mathematically differentiable shape approximating the physiologic shape of the heart chamber from said enlarged set of points.

3. (Currently Amended) The method of claim 2 wherein said collecting step further includes collecting ~~collection process collects~~ points at a set of times synchronized with the cardiac rhythm cycle, such that said points have physical coordinates in space at a specific time in the cardiac cycle.

4. (Currently Amended) The method of claim 3 wherein said ~~computing process calculates a~~ step of repeating said selecting steps and said forming step forming a computed convex hull shape is taken at discrete intervals in time corresponding to various stages of the heart cycle, generating a plurality of ~~several~~ hull shapes.

5. (Currently Amended) The method of claim 4 further comprising the step of sequentially comparing ~~3 wherein~~ said ~~collection of several~~ hull shapes ~~are sequentially compared~~ to develop a measurement of cardiac wall position.

6. (Currently Amended) The method of claim 4 further comprising the step of sequentially comparing ~~wherein~~ said ~~collection of several~~ hull shapes ~~are sequentially compared~~ to develop a measurement of cardiac wall velocity.

7. (Currently Amended) The method of claim 4 further comprising the step of sequentially comparing ~~wherein~~ said ~~collection of several~~ hull shapes ~~are sequentially compared~~ to develop a measurement of cardiac wall acceleration.

8. (Currently Amended) The method of claim 3 wherein said collecting step ~~collection process~~ is carried out over more than one cardiac cycle to create an average cardiac cycle creating a composite average of a series of heart beats.

9. (Previously Presented) The method of claim 8 wherein the composite average is measured periodically for a patient over the course of a therapy or treatment regime.

10. (Currently Amended) The method of claim 1 wherein said collecting step ~~collection process~~ is carried out over more than one cardiac cycle to create an average cardiac cycle creating a composite average of a series of heart beats.

11. (Previously Presented) The method of claim 10 wherein the composite average is measured periodically for a patient over the course of a therapy or treatment regime.